Abstrakt v angličtině

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Title of diploma thesis: Extraction of zinc from water solutions using solid phase extraction in sequential injection analysis

This work is devoted to the extraction of zinc from aqueous samples by solid phase extraction in sequential injection analysis. Zinc extraction was tested with solutions of three concentrations (100 nmol/l, 200 nmol/l, 500 nmol/l) using four different chelating sorbents (Iontosorb OXIN, Iontosorb SALICYL, Iontosorb IDA a Toyopearl) at seven different conditions (pH of 3, 4, 5, 6, 7, 8 and 9) of the wash buffer and at pH 2 of the elution solution. During the detection was monitored absorbance of zinc complex with the reagent 4-(pyridyl-2-azo) resorcinol at wavelengths of 490, 510, 560 and 600 nm.

In comparison of the four sorbents under different conditions of measurement was determined as the best sorbent Iontosorb OXIN and suitable conditions for the extraction – pH of the wash buffer and of the sample 6 and higher.